Course number:  Pharmacology 4350a
Course title:  Clinical Pharmacology
Year:  Fall Term 2018

Clinical pharmacology is a scientific and medical discipline dedicated to the bench-to-bedside study of drug action through an in-depth knowledge of human pharmacology and therapeutics. This is an introductory course in clinical pharmacology that focuses on fundamental concepts highlighted with examples from clinical cases, therapeutic applications and relevance to drug discovery and development.

Lectures:
Wednesday 12:30-2:30 MSB282

Requisites:
Prerequisite(s): Pharmacology 3620 or permission from the Department

Senate regulation regarding the student’s responsibility regarding requisites:
Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Accessibility Statement
*Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.*

Course coordinator:
Dr. Rommel Tirona    Email: rommel.tirona@schulich.uwo.ca
Office: University Hospital, Room C9-100D
Meetings by appointment please email.

Lecturers:
Rommel Tirona, PhD (rommel.tirona@schulich.uwo.ca)
Ute Schwarz, MD, PhD (Ute.Schwarz@lhsc.on.ca)
Edna Choo, PhD (choo.edna@gene.com) - from Genentech
Michael Rieder, MD, PhD (mrieder@uwo.ca)
Doreen Matsui, MD (Doreen.Matsui@lhsc.on.ca)
George Dresser, MD, PhD (George.Dresser@lhsc.on.ca)

OWL:  https://owl.uwo.ca/portal
Students with OWL issues please email owl@uwo.ca
Course Syllabus

Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Topic</th>
<th>Lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1</td>
<td>12:30</td>
<td>Clinical pharmacokinetics and pharmacodynamics 1</td>
<td>Tirona</td>
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<tr>
<td></td>
<td>1:30</td>
<td>Clinical pharmacokinetics and pharmacodynamics 1</td>
<td></td>
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<tr>
<td>September 19</td>
<td>12:30</td>
<td>Clinical pharmacokinetics and pharmacodynamics 2</td>
<td>Tirona</td>
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<tr>
<td></td>
<td>1:30</td>
<td>Clinical pharmacokinetics and pharmacodynamics 2</td>
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<tr>
<td>September 26</td>
<td>12:30</td>
<td>Drug-drug and food-drug interactions</td>
<td>Schwarz</td>
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<td>1:30</td>
<td>Drug Discovery</td>
<td>Choo</td>
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<td>October 3</td>
<td>12:30</td>
<td>Drug therapy in special populations: Children</td>
<td>Rieder</td>
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<tr>
<td></td>
<td>1:30</td>
<td>Adverse Drug Reactions</td>
<td>Rieder</td>
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<tr>
<td>October 10</td>
<td>12:30</td>
<td>Reading Week – no class</td>
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<td>1:30</td>
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<td>October 17</td>
<td>12:30</td>
<td>Midterm Exam</td>
<td>Tirona</td>
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<td>October 24</td>
<td>12:30</td>
<td>Drug therapy in special populations: Gender/Pregnancy/Race</td>
<td>Matsui</td>
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<td></td>
<td>1:30</td>
<td>Ethical Considerations in Clinical Research</td>
<td>Matsui</td>
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<td>October 31</td>
<td>12:30</td>
<td>Drug therapy in special populations: Liver and Kidney Disease</td>
<td>Schwarz</td>
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<td></td>
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<td>Critical Appraisal of the Drug Literature</td>
<td>Schwarz</td>
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<td>November 7</td>
<td>12:30</td>
<td>Student paper presentations</td>
<td>Tirona</td>
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<td>1:30</td>
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<tr>
<td>November 14</td>
<td>12:30</td>
<td>Student paper presentations</td>
<td>Tirona</td>
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<td>1:30</td>
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<tr>
<td>November 21</td>
<td>12:30</td>
<td>Student paper presentations</td>
<td>Tirona</td>
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<td>November 28</td>
<td>12:30</td>
<td>Pharmacogenetics and personalized medicine</td>
<td>Schwarz</td>
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<td></td>
<td>1:30</td>
<td>Pharmacogenetics and personalized medicine</td>
<td>Schwarz</td>
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<tr>
<td>December 5</td>
<td>12:30</td>
<td>Drug therapy in special populations: Elderly</td>
<td>Dresser</td>
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<td></td>
<td>1:30</td>
<td>Drug development</td>
<td>Dresser</td>
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Course Materials

Papers and scientific articles provided by instructors.

Evaluation:

Component | % of Final Mark
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Student Presentations (on published research papers) | 25%
Midterm | 35%
Final Exam | 40%

Additional Information/Statements

Policy on Rounding and Bumping of Grades

Across the Basic Medical Sciences Undergraduate Education programs and within the department of *Physiology and Pharmacology* we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. Final grades in this course, irrespective of the number of decimal
places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.4 becomes 74, and 74.5 becomes 75. Marks WILL NOT be bumped to the next grade or GPA, e.g. a 79 will NOT be bumped up to an 80, an 84 WILL NOT be bumped up to an 85, etc. The mark attained is the mark you achieved and the mark assigned; requests for mark “bumping” will be denied.

**Statement on Academic Offences**
“Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website: http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf

**Policy on Plagiarism**
The Department of Physiology and Pharmacology strongly condemns plagiarism. Plagiarism is the “act or instance of copying or stealing another’s words or ideas and attributing them as ones own.” (Excerpted from Black’s Law Dictionary, West Group, 1999, 7th ed. Pg 1170 and the definition used by Western’s Scholastic Discipline document). Plagiarism can be intentional or unintentional and regardless of intent, is a scholastic offence. It should be noted that self-plagiarism, plagiarizing ones own words for multiple assignments is subjected to the same penalty as plagiarizing another. Courses in Physiology and Pharmacology use turnitin, a similarity checking software embedded within OWL. We encourage all students to run their assignments through turnitin prior to submitting their reports for grading. Any report flagged as yellow (25-49% matching text), orange (50-74% matching text) or red 75-100% matching text) will be considered plagiarism (pending investigation by the instructor). It should be noted that a document could be plagiarized yet still pass the similarity check on turnitin.
The minimum penalty for a first time plagiarism offence of any kind is a grade of zero on the assignment. In addition, details of the offence will be forwarded to Dean’s office and stored. A second offence will carry a much stricter penalty in line with Western’s Scholastic Discipline policies
http://www.westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=1&command=showCategory&SelectedCalendar=Live&ArchiveID=

**Cell Phone and Device Policy**
The Department of Physiology and Pharmacology is committed to ensuring that testing and evaluation are undertaken fairly. For all tests and exams, it is the policy of the Department of Physiology and Pharmacology that any devices with a battery (e.g. cell phone, tablet, camera, watch, smart watch, ipod) are strictly prohibited. These devices MUST be left either at home or with the students bag/jacket at the front of the room and MUST not be at the test/exam desk or in the individual’s pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam. Non-programmable calculators are only allowed when indicated by the instructor. The Department of Physiology and Pharmacology is not responsible for stolen/lost or broken devices.

**Appeals Policy**
The Department of Physiology and Pharmacology follows the Western University student academic appeals policy
All appeals to individual graded course components must be submitted to the course instructor within 3 weeks of the grade being released. All final course grade appeals must be received by January 31 (1st term classes) or June 30 (2nd term half classes and full year classes). You must first appeal to the course manager. If this appeal is rejected, then you can appeal to the Undergraduate Chair of the Department of Physiology and Pharmacology (Brad.Urquhart@schulich.uwo.ca). If this appeal is rejected, you may then appeal to the Assistant Dean of the Bachelor of Medical Sciences Undergraduate Education Committee (Candace.Gibson@schulich.uwo.ca).

You must have suitable grounds for appeal which may include: 1) appeal on medical or compassionate grounds; 2) appeal based on extenuating circumstances beyond your control; 3) appeal based on bias, inaccuracy or unfairness. All appeals must be accompanied by a detailed explanation along with supporting documentation. You should submit your appeal as an e-mail with a single attachment. If you have multiple supporting documents, you should merge them into a single document.

Absence from course commitments
A. Absence for medical illness:

Students must familiarize themselves with the Policy on Accommodation for Medical Illness: https://studentservices.uwo.ca/secure/index.cfm

Statement from the Dean's Office, Faculty of Science
If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to the Dean's office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see: http://www.uwo.ca/univsec/handbook/appeals/medical.pdf

A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found at: https://studentservices.uwo.ca/secure/medical_document.pdf

B. Absence for non-medical reasons:
A clear indication of how non-medical absences from midterms, tutorials, laboratory experiments, or late essays or assignments, will be dealt with must be provided. If documentation is required, such documentation must be submitted by the student directly to the appropriate Faculty Dean’s Office and not to the instructor. It will subsequently be the Dean’s Office that will determine if accommodation is warranted.
C. Special Examinations
A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents.

A Special Examination must be written at the University or an Affiliated University College no later than 30 days after the end of the examination period involved. To accommodate unusual circumstances, a date later than this may be arranged at the time permission is first given by the Dean of the Faculty. The Dean will consult with the instructor and Department Chair and, if a later date is arranged, will communicate this to Registrarial Services. If a student fails to write a scheduled Special Examination, permission to write another Special Examination will be granted only with the permission of the Dean in exceptional circumstances and with appropriate supporting documents. In such a case, the date of this Special Examination normally will be the scheduled date for the final exam the next time the course is offered.

Support Services:
Registrarial Services: http://www.registrar.uwo.ca
Academic Counselling (Science and Basic Medical Sciences): http://www.uwo.ca/sci/counselling/
USC Student Support Services: http://westernusc.ca/services/
Student Development Services: http://www.sds.uwo.ca
Student Health Services: http://www.shs.uwo.ca/
Students that are in emotion/mental distress should refer to Mental Health@Western http://www.uwo.ca/uwocom/mentalhealth/ for a complete list of option about how to obtain help.